



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
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RBW6205G00331-3G
Job Sheet 186301



Part No: RBW6205G00331-3G

Job Qty: 1 pcs *2 m/c*

Part Name: Main Rotor Blade Retention Bolt R&R Tool



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/14/18

Job Tracking No:

Due Date: 12/10/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6205G00331-3G Rev. 2B IPP Rev. A 18.06.12 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Small Fab - 1	1 pcs	12/10/18		0.00	0.10	Small Fab - 1		<i>MCC</i>
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
120	QC 5	1 pcs	12/10/18		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 38		
							QC 5 - 42		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
130	Packaging 3-1 - Stock - B4B	1 pcs	12/10/18		0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		
							Packaging 3 - 6 - B4B		



Container No: S184253



Part: RBW6205G00331 - 3G

Job No: 186301

Serial No/Batch: S184253

Revision: 2B

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 05/27/19

MAY 28 2019 **DAS 40 9-89**

				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
140	QC 21 - SA	1 pcs	12/10/18	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70
Part Op 110 - (Small Fab) Pick and pack case. Descriptions: 120 - QC5- Inspect part completeness to step on W/O) 130 - (Identify as per dwg & Stock Location: _____) 140 - (QC21- Final Inspection - Work Order Release)					
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
10137	Small Pistol Case, Plastic	1 Ea (1 ea)	110-Small Fab - 1	11351055	11308026
RBW6205G03451-3G	Bolt Guide Removal & Install	1 pcs (1 ea)	110-Small Fab - 1	5176721	
RBW6205G08451-3G	Puller Bolt Removal	1 pcs (1 ea)	110-Small Fab - 1	5109798	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
110-Small Fab - 1	10137	1	10	0	
	RBW6205G03451-3G	1	0	0	
	RBW6205G08451-3G	1	2	0	
Part Specifications					
Specifications could not be found.					

GA212

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9-85

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RBW6205G00331-3G

Job Sheet 186301



7393 J20.

Part No: RBW6205G00331-3G

Job Qty: 1 ea

Part Name: Main Rotor Blade Retention Bolt R&R Tool



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 11/14/18

Job Tracking No:

Due Date: 12/10/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6205G00331-3G Rev. 2B IPP Rev. A 18.06.12 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	12/10/18	12/10/18	0.00	0.00	Start Up Small Fab-2		
110	Small Fab	1 pcs	12/10/18	12/10/18	0.00	0.10	Small Fab-3		
120	QC	1 pcs	12/10/18	12/10/18	0.00	0.00	QC5		
130	Packaging	1 pcs	12/10/18	12/10/18	0.00	0.00	Packaging3-1		
140	QC21-SA	1 Ea	12/10/18	12/10/18	0.00	0.00	QC21		

Part Op
Descriptions: **110** - Pick and pack case.

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
10137	Small Pistol Case, Plastic	1 Ea (1 ea)	90-Start up Operation	
RBW6205G03451-3G	Bolt Guide Removal & Install	1 Ea (1 ea)	110-Small Fab	
RBW6205G08451-3G	Puller Bolt Removal	1 Ea (1 ea)	110-Small Fab	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	10137	1	17	0
110-Small Fab	RBW6205G03451-3G 56.154	1	0	0
	RBW6205G08451-3G	1	2	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

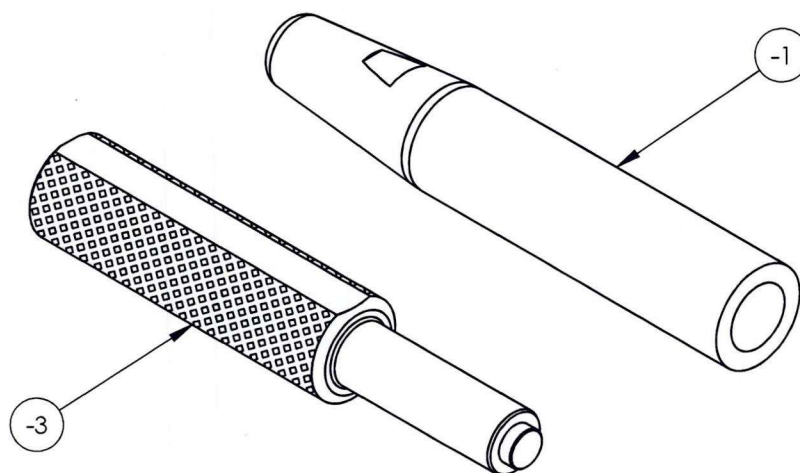
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 																		
Description Work Order Deviation				Disposition																					
							Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
A	ADDED 2.50 REF. DIMENSION TO -1. ALSO ADDED .455 REF. DIMENSION TO -3.	9/24/2009	WP	GE
1	CH'D -3 HANDLE DIA., WAS $\varnothing 1.20$ IS $\varnothing 1.28$. -3 REF. DIM. .455 IS NOW .767.	9/28/2009	WP	GE
2	REMOVED ENGRAVING FROM -1. CH'D -3 OD. FROM $\varnothing 1.28$ TO $\varnothing 1.276$, MILLED FLAT FROM .51 TO .587 REF., AND .767 REF. TO .50 REF. ALSO CH'D -3 .032x60° TO .03 @ 30°, AND .08x60° TO .08 @ 60°. ALSO ADDED VISIBLE KNURLING.	10/3/2009	WP	RW
2A	CH'D WAS CLEAR HARD ANODIZING IS CLEAR ANODIZING AND ADDED KNURL NOTE.	10/27/2010	WP	GE
2B	SEPERATED TOOLS FROM KIT RBW6205G00331-3G. ADDED AW139 TO USED ON MODEL.	10/17/2013	CFS	RW



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 186301 MJS
18-11-14

ORIGINAL No. REF.
RBW3205G00331-3G $\equiv$ 3G3205G00331
DO NOT USE, FOR REFERENCE ONLY.

FUNCTION: USED TO REMOVE AND INSTALL THE
MAIN ROTOR BLADE BOLTS.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	BOLT GUIDE	6061	RBW6205G03451-3G	1
			-3	1	PULLER	6061	RBW6205G08451-3G	1
		B/O	-5	1	PISTOL CASE	BLACK PLASTIC	R.S.R. SPORTS #10137	N/S

RED BARN MACHINE	
TITLE M/R BLADE RETENTION BOLT REM/INSTL TOOL KIT	
DWG NO. RBW6205G00331-3G	REV 2B
MAT'L	DRAWN BY: SMITH
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX $\pm$.005 FRACTIONS $\pm$ 1/32 .XX $\pm$.01 ANGLES $\pm$.5° .X $\pm$.1	APPROVED <i>D Weil</i>
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	HEAT TREAT FINISH SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL AGUSTA AW139
SCALE 1:2	DATE 10/17/2013 SHEET 1 OF 1